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## **1. OBJECTIVE AND FIELD OF APPLICATION**

1.1. The Standard hereunder is of obligatory observance in all the national territory and its objective is to establish the uniform procedures, activities, criteria, strategies and operative techniques for the prevention, control and eradication of Newcastle Disease in its velogenic presentation, in all the national territory, including in wild fowl, as well as the prevention and control of the mesogenic presentation.

1.2. The vigilance of this Standard belongs to the Ministry of Agriculture, Livestock and Rural Development, and also to the state governments in relation to their respective attributes and territories, under the corresponding coordination agreements.

1.3. The application of the provisions in this Regulatory Standard is the duty of the Animal Health Department, and also of the Ministry of Agriculture, Livestock and Rural Development's Federal State Agencies in relation to their respective attributes and territorial circumscriptions.

## **2. REFERENCES**

In order to correctly apply this Standard, the following Mexican Regulatory Standard must be consulted:

NOM-008-SCFI-1993 General Measure Units System.

## **3. DEFINITIONS AND ABBREVIATIONS**

For the purposes of this regulatory standard, the following terms shall be construed respectively to mean:

3.1. Viral isolation: Diagnostic test done at an approved laboratory for the National Campaign against the Newcastle Disease, by inoculation of chick embryos with samples from birds, for the isolation and identification of the Newcastle Disease virus.

3.2. Outbreak: Presence of one or more cases of the Newcastle Disease in its velogenic presentation in a determinate geographical area and in a given time span.

3.3. Campaign: The National Campaign against the Newcastle disease in its velogenic presentation.

3.4. Animal Sanitary Certificate: Official document issued by the Ministry or by those persons so approved or accredited to certify the upholding of this Standard. In the case of animals, it shall be signed by an approved or from the Ministry veterinary doctor.

3.5. Document of Proof of Free Flock: Official document issued by the Ministry of Agriculture, Livestock and Rural Development and granted to the owners of the flocks of primary and multiplier breeders enrolled in the Campaign and that have complied with the guidelines established in this Standard.

3.6. Document of proof of free farm: Official document issued by the Ministry of Agriculture, Livestock and Rural Development and granted to the owners of the broiler and layer farms enrolled in the Campaign and that have complied with the guidelines established in this Standard.

3.7. Document of proof of free enterprise: Official document issued by the Ministry of Agriculture, Livestock and Rural Development and granted to the enterprise owners of the birds enrolled in the Campaign and that have complied with the guidelines established in this Standard.

3.8. Progressive verification: The avian farms and facilities that are slowly being integrated into the campaign programs.

3.9. Control: Set of animal sanitary measures that have as an objective to reduce the incidence and prevalence of the Newcastle Disease in a determinate geographical area.

3.10. Department: The General Animal Health Department

3.11. ND: Newcastle Disease

3.12. VND: Velogenic Newcastle Disease

3.13. Eradication: Total elimination of the Newcastle Disease in its velogenic presentation, in a determinate geographical area.

3.14. Farm: Avian facilities or centers, that for the purposes of this Standard, are used for layers, broilers, growth, ornamental bird rearing and others that the Ministry may so deem necessary.

3.15. Approved Laboratory: Diagnostic laboratory recognized by the Ministry of Agriculture, Livestock and Rural Development.

3.16. Approved Veterinary Doctor: Professional recognized by the Ministry of Agriculture, Livestock and Rural Development to perform official animal sanitary activities.

3.17. Official Veterinary Doctor: Professional paid by the Ministry of Agriculture, Livestock and Rural Development.

3.18. Flock: Set of birds, that for the purposes of this Standard are primary or multiplier

breeders.

3.19. Procedures or phases: Set of animal sanitary activities done in a strategic and sequential manner, necessary for the eradication of the Newcastle Disease in its velogenic presentation.

3.20. Prevention: Set of animal sanitary activities, based on epizootiological studies, whose object is to avoid the presentation of the Velogenic Newcastle Disease.

3.21. Diagnostic Test: Test for the isolation and identification in chick embryo of the Newcastle Disease virus.

3.22. Ministry: Ministry of Agriculture, Livestock and Rural Development.

3.23. Low prevalence zone: Determinate geographical area, where the presence of recent VND cases has a minimum frequency, during a given interval of time.

3.24. Control zone: Determinate geographical area, where animal sanitary measures are operated, in order to reduce the incidence or prevalence VND, in a given interval of time.

3.25. Eradication zone or state: Determinate geographical area, where animal sanitary measures are operated, in order to eliminate VND, or epizootiological studies are being made, in order to verify the absence of said disease, in a two year period.

3.26. Free zone or state: Determinate geographical area, where VND has been eliminated or where there have not been positive cases of the disease, during a year.

#### **4. GENERAL PROVISIONS**

4.1. The Campaign is oriented towards the eradication of VND in primary and multiplier breeders, layers, broilers, fighting cocks, growth flocks and in ornamental birds.

As far as wild fowl are concerned, the Ministry shall determine the species in which, by reasons it considers necessary, this Standard shall be applied in the time and place it so deems.

4.2. The responsibility of the operation of the Campaign programs shall be shared amongst the federal and state governments, the owners, producers, traders, bird transporters and others that the Ministry so determines.

4.3. The protection of states, regions, zones, birds free from the disease or when a state or zone is within one year of entering the eradication phase, shall be done by a strict control of animal movements.

4.4. The flocks or farms where there are positive birds to the official diagnostic test for ND, will not be traded nor moved to any other destination that is not slaughter.

4.5. The campaign shall last until all the country is declared free of VND.

## **5. APPROVAL**

5.1. The veterinary doctors that comply with the requirements established in the Mexican Regulatory Standard issued to that effect, shall be approved for activities related to ND.

5.2. The approved veterinary doctors shall participate in the verification of flocks and farms, as well as the eradication activities determined by the Ministry as well as, in the epidemiological surveillance in areas under control, intensive control, eradication and free from VND.

5.3. The approved laboratories shall be able to issue results of the virological isolation and identification for the verification of free to VND flocks and farms, as well as taking the samples in eradication zones, regions or states, with the purpose of its official liberation.

## **6. CAMPAIGN PHASES**

6.1. The Campaign shall have the following operation phases:

- a) Control;
- b) Intensive control;
- c) Eradication; and
- d) Free

6.2. The phases will be done in three levels:

- a) State
- b) Region
- c) Zone

6.3. To obtain official recognition of the Campaign phases the following requirements must be complied with:

6.3.1. Control phase:

- a) Control of the movement of animals, products and by-products and avian equipment.
- b) Epidemiological surveillance system.

- c) Campaign promotion program.
- d) Verification of primary and multiplier breeders.

#### 6.3.2. Intensive control phase:

- a) Control of movements
- b) Epidemiological surveillance system.
- c) Diagnostic infrastructure
- d) Campaign promotion program.
- e) Verification of primary and multiplier breeders.
- f) Progressive verification of farms of commercial layers, broilers, fighting cocks, wild fowl, song and ornamental birds, either in production or rearing.

#### 6.3.3. In the eradication phase:

- a) Keep record of the movements of animals, products, by-products and avian equipments.
- b) Establish the epidemiological surveillance system.
- c) Prepare a Campaign promotion program.
- d) For the incorporation of states to the eradication phase, the absence of VND in farms of commercial layers, broilers, fighting cocks, wild fowl, song and ornamental birds, either in production or rearing shall be corroborated through epidemiologically taking samples of the size estimated by the Department.
- e) Whenever dealing with primary breeders, they shall invariable comply with the corresponding guidelines to obtain the document of proof that they are free from VND.

#### 6.3.4. In the free phase:

- a) In order to enter the free phase, a zone, state or region must remain at least 12 months in eradication phase, and repeat the epidemiological testing that validates its animal sanitary situation, and having previously complied with the provisions of point 6.3.3. of this Standard.
- b) Have animal health emergency and epidemiological surveillance systems.

To declare a zone as free it shall be done by accord of the Minister of Agriculture, Livestock and Rural Development, and it shall be published in the Official Federal Gazette.

## **7. DIAGNOSIS**

7.1. For the purposes of the Campaign the samples shall be sent to laboratories approved by the Ministry.

7.2. The official diagnostic test for the Campaign shall be the viral isolation and identification of velogenic strains for ND.

7.3. For the isolation and identification of ND virus, the samples must be:

- Trachea
- Lung
- Spleen
- Encephalon
- Cecal tonsils

7.4. For the isolation and identification of the ND virus, in fighting cocks, wild fowl, and song and ornamental birds, the samples shall be taken by cloacal and/or pharyngeal swabs, and/or fresh faeces and/or the organs mentioned hereinbefore.

7.5. Shipment of samples to the laboratory approved by the Ministry.

The organs and/or fresh faeces, shall be sent in jars or sterile bags, frozen and in no more than 48 hours after they were taken; the swabs shall be sent according to what the Laboratory approved by the Ministry requires.

7.6. Technique for the isolation of the ND virus and the interpretation of the results thereof.

When handling organs, the tissue must be cut in small chunks with sterile scissors and homogenized within a mortar or a Tenbroeck tissue grinder, using phosphate tryptose broth in a concentration of weight/volume.

When handling swabs or faeces, phosphate tryptose broth in a concentration of weight/volume shall be added.

After that, for any of the three types of samples mentioned before, the procedure shall be the following:

- a) Centrifuge at 2500 RPM during 20 min.; decant and filter through a millipore membrane of 0.45 u;
- b) Inoculate five, 9 to 11 day old embryos with 0.2 ml of the supernatant by the amnio-allantoid chamber;
- c) Candle the embryos with an ovoscope at least every 24 hrs.

The embryos that die in the first 24 hrs shall be considered as having died of traumatism.

Generally the VND virus kills embryos at two to seven days after inoculation, therefore those embryos that die after the first 24 hrs , must be kept in refrigeration at 4°C for further testing.

The amnio-allantoid fluid of the dead embryos, has sufficient hemagglutinines to produce the agglutination of chicken erythrocytes. This property gives a convenient and simple basis for the identification of the virus by means of the plate agglutination and the inhibition of hemagglutination by a monospecific serum.

- d) Take amnio-allantoid fluid of every dead embryo using a tuberculin syringe.
- e) Place 0.050 to 0.100 ml of fluid in three different places on the glass plate.
- f) The first drop shall be only of amnio-allantoid fluid, to the second add an equal volume of negative serum and to the third add antiserum against ND virus (positive serum), mix well using wooden toothpicks, a different one for each drop, incubate three to five minutes at room temperature.
- g) Add to each of the suspensions 0.050 to 0.100 ml of 5% washed chicken erythrocytes and mix with toothpicks. Move the plate softly during 10 to 15 sec and observe for hemagglutination. The positive cases hemoagglutinate quickly.
- h) If the sample is positive there will be hemagglutination in the fluid plus erythrocyte suspension and in the fluid plus negative serum plus erythrocytes, and there will be hemagglutination-inhibition in the fluid plus anti-VND plus erythrocytes, as shown in the following table:

<b>MIX</b>	<b>ERYTHROCYTE AGGLUTINATION</b>
Problem fluid + erythrocytes	Positive or negative
Problem fluid + serum against ND + erythrocytes	Positive or negative
Known ND virus + erythrocytes	Positive

Known ND virus + serum against ND  
+ erythrocytes.

Negative

The embryos that die after the first 24 hrs, must be placed in refrigeration for at least 30 min., in order to more easily obtain the free from erythrocytes allantoic fluid since they can alter the reading of the reaction.

After that, only the clear or slightly red amnio-allantoic fluid is tested. If hemolyzed or contaminated fluids are used it is easy to observe false-positive reactions.

The ND virus is a contaminant in the laboratory, therefore all precautions must be taken to avoid the contamination of the samples being processed.

#### 7.7. Characterization of the ND virus strains

The technique to determine the time for Half the Mortality at the Minimum Lethal Dose for Chick Embryo, is the following:

- a) Dilute the problem allantoic fluid in phosphate tryptose broth, at  $10^{-1}$  to  $10^{-10}$ .
- b) Use the last five dilutions of  $10^{-6}$  to  $10^{-10}$ .
- c) Inoculate ten, 9 to 11 day old embryos per each dilution, with 0.02 ml per embryo in the allantoic chamber. Five embryos shall be inoculated at time X and 8 hours later the other five, which represents time Y;
- d) Record the embryo mortality during the 128 hours incubation period. The embryos that die within the first 24 hours shall not be taken into consideration to estimate the embryo mortality time; and
- e) Register the identification of the embryos that die, separating the groups for the X hour and the y hours.

To estimate the embryo mortality time, the following formula shall be applied:

$$\text{TME} = \frac{(\text{NEX})(\text{X}) + (\text{NEY})(\text{Y}) + \text{ETC}}{\text{NEM}}$$

Where:

TME = Embryo mortality time

NEX = Number of dead embryos for hour X

X = Hour X y = Hour y

NEY = Number of dead embryos for hour Y

ETC = The same procedure is applied to the other dilutions

NEM = Total number of dead embryos

<b>MORTALITY TIME</b>	<b>TYPE OF NEWCASTLE STRAIN INTERPRETATION</b>
Less than 60 hours	Velogenic
From 60 to 90 hours	Mesogenic
More than 90 hours	Lentogenic

## **8. CAMPAIGN PROGRAMS**

8.1. Every owner of birds, flocks or avian farms, must participate in one of the programs of the Campaign.

8.2. The Campaign programs are:

- a) Free flock program; and
- b) Free farm program.

8.3. In all the cases, the Ministry shall issue a document of proof whereby it is officially accepted that the Standard is being complied with.

8.4. To obtain the document of proof for free of VND flocks and farms the following procedure must be complied with:

8.4.1. Send to the Ministry the inscription to the Campaign format signed by the owner or legal representative and the official or approved veterinary doctor.

8.4.2. Send to the Ministry the laboratory test results that show the results of the viral isolation of VND, issued by the laboratory approved by the Ministry, and done according to the provisions of point 7 of this Standard.

The number of samples required for the issuance of document of proof of free flocks and farms are the following:

<b>ZOOTECHNICAL PURPOSE</b>	<b>NUMBER OF SAMPLES SENT</b>	<b>PERIODICITY OF SAMPLES (months)</b>	<b>SPECIFICATIONS AT THE TIME THEY ARE TAKEN</b>
PRIMARY BREEDERS	35*	3 - 4	After 20 weeks of age
MULTIPLIER BREEDERS	35*	3 - 4	After 18 weeks of age
COMMERCIAL LAYERS	70*	3 - 4	Any age
BROILERS	70*	Every lot that comes into the facilities	After 12 days of age
FIGHTING, SONG AND ORNAMENTAL BIRDS	35*	3 - 4	Any age

**WILD FOWL      AS DETERMINED BY THE DEPARTMENT**

\* At least 10 samples shall be of live birds or organs, and the rest (25), may be tracheal or cloacal swabs; retesting will be done in the same manner with 35 tracheal or cloacal swabs.

\*\* At least 10 samples shall be of live birds or organs, and the rest (60), may be tracheal or cloacal swabs; retesting will be done in the same manner with 70 tracheal or cloacal swabs.

\*\*\* Must correspond to tracheal or cloacal swabs retesting will be done in the same manner.

In case of a positive isolation, the following shall proceed:

1. - In free and in eradication zones

- Quarantine of the premises, time and place to be determined by the Ministry;

- Slaughter of positive flocks, sending them to a slaughter house or sacrificing them in the farm, and that shall be followed by burial, incineration or other procedure so deemed by the Ministry;

- Sanitizing and disinfection of the facilities, as determined in each case by the Ministry. The fulfillment of the process hereinbefore stated shall be supervised by an approved or official veterinary doctor; and

- Inactivation of organic wastes of the premises, as the Ministry shall determine in each case.

## II. In control zones

- Quarantine of the premises, time and place to be determined by the Ministry;

- The movement of birds, waste and equipments of the quarantined facilities is prohibited;

- Once the premises are empty, they shall be sanitized and disinfected as determined in each case by the Ministry. The fulfillment of the process hereinbefore stated shall be supervised by an approved or official veterinary doctor; and

- Inactivation of organic waste in the premises, as the Ministry shall determine in each case.

8.4.3. All flocks and farms that have the document of proof as free from VND, during the time that the document is in force shall retest for virological diagnosis in accordance to the provisions of point 8.4.2., beginning from the date of issuance of same and the owners and approved veterinary doctors shall be responsible for the forwarding of the test results to the respective Federal State Agency, within 30 days after the corresponding dates; to the contrary the document of proof shall be cancelled.

## 8.5. Effective date of the documents of proof

8.5.1. The documents of proof of broiler and double-purpose primary and multiplier breeders free flocks will be in effect for 10 months, from the date of issuance of the laboratory test results.

8.5.2. The documents of proof of layers primary and multiplier breeders free flocks will be in effect for 12 months, from the date of issuance of the laboratory test results.

8.5.3. The documents of proof of layers primary and multiplier breeders free flocks will be in effect for 12 months, from the date of issuance of the laboratory test results.

8.5.4. The documents of proof of enterprises, flocks and farms free from VND, in wild, song and ornamental fowl and other domesticated fowl will be in effect for 12 months, from the date of issuance of the laboratory test results.

#### 8.6. Use and restrictions of the documents of proof.

The documents of proof must always be shown when it is so required by the official personnel.

The documents of proof that come with shipments of birds, avian products or by-products, may be photocopies of the original document of proof provided that they are validated with the seal and signature of the official veterinary doctor or the one approved for the Campaign against Newcastle Disease.

### 9. IMMUNIZATION

9.1. Vaccines should be handled under the strictest of conservation methods for biologicals, maintaining the cold-chain; this shall be the shared responsibility of owners and official or approved veterinary doctors, enterprises that produce or sell the biologicals, as well as those others the Ministry so determines.

9.2. In zones enzootic to the disease, lyophilized, and emulsified vaccines against the said disease are obligatory.

9.3. In eradication or free zones, only live vaccines with lentogenic and inactivated strains can be used.

9.4. The Ministry may request from the owners or the bird handler, a vaccination program that is in accord with the epidemiological situation of ND, and in accordance to the geographical location of the avian facilities.

9.5. The Avian Promotion Centers in the country must use the ND emulsified vaccine.

9.6. For the production of live ND vaccines, classified lentogenic strains must be used.

### 10. QUARANTINE MEASURES

10.1. The production units, may be subjected to quarantine measures in the following circumstances:

- Precautionary quarantine when there is a suspected VND outbreak.
- Definite quarantine when an outbreak is confirmed by the isolation of a velogenic strain of ND virus.

10.2. The application or lifting of quarantine measures, must be officially notified by the Ministry, indicating the following information:

- The reason;
- The movement restrictions; and
- The applicable animal sanitary measures.

## 11. COMPENSATION

11.1. The Ministry shall coordinate with the state governments, producers and other persons related to the avian production, compensation mechanisms, in money or in kind, in order to allow the elimination of an outbreak, without injuring economically the producer.

## 12. MOVEMENT

12.1. The Animal Sanitary Certificate shall be required for the movement of birds in all the national territory, taking into account the zones of origin and destination, reason for the movement and the requisites that shall be as follows:

12.1.1. ORIGIN: Control and in eradication zone  
DESTINATION: Control zone

REASON OF MOVEMENT	REQUISITES
a) Breeders, replacements, broilers and slaughter birds.	- None
b) Fighting cocks, birds for fairs, exhibitions, of song, ornament and wild fowl	- None

12.1.2. ORIGIN: Control zone  
DESTINATION: Free or in eradication zone

REASON OF MOVEMENT	REQUISITES
a) Breeders, replacements, broilers under 3 days of age.	- Document of proof of origin VND free
b) Breeders, replacements, broilers more than 3 days of age.	- Document of proof of VND free flock or farm

- |   |  |
|---|--|
| c) Fighting cocks, birds<br>for fairs, exhibitions,<br>of song, ornament and<br>wild fowl | - Document of proof of<br>VND free flock, farm<br>or enterprise                  |
| d) Wild fowl and other<br>domesticated fowl<br>not considered in<br>the preceding points  | - Shall be determined in<br>each case by the respective<br>Federal State Agency. |

12.1.3. ORIGIN: Eradication zone  
DESTINATION: Free or in eradication zone

REASON OF MOVEMENT	REQUISITES
a) Breeders, replacements, broilers under 3 days of age.	- Document of proof of origin VND free
b) Breeders, replacements, broilers more than 3 days of age.	- Document of proof of VND free flock or farm
c) Fighting cocks, birds for fairs, exhibitions, of song, ornament and wild fowl	- Document of proof of VND free flock, farm or enterprise
d) Wild fowl and other domesticated fowl not considered in the preceding points	- Shall be determined in each case by the respective Federal State Agency.

12.1.4. ORIGIN: Free zone  
DESTINATION: Control zone

REASON OF MOVEMENT	REQUISITES
a) Breeders, replacements, broilers and slaughter birds.	- None

b) Fighting cocks, birds  
for fairs, exhibitions,  
of song, ornament and  
wild fowl

- None

c) Wild fowl and other  
domesticated fowl  
not considered in  
the preceding points

- Shall be determined in  
each case by the respective  
Federal State Agency.

12.1.5. The birds for fighting, fairs, exhibitions, song and ornament as referred to in the points 12.1.1., 12.1.2., 12.1.3., and 12.1.4., will not lose their place of origin if they do not remain more than 30 days at their place of destination; so that they can return to their place of origin, showing their document of proof of VND free flock, farm or bird, except for those birds whose origin is in free states, then they shall only show their Animal Sanitary Certificate.

12.2. The movement of avian products shall be regulated in all the national territory taking into account the zone of origin, and destination, the reason for the movement and the requisites that are hereunder stated:

12.2.1. ORIGIN: Control and in eradication zone  
DESTINATION: Control zone

REASON OF MOVEMENT	REQUISITES
a) Fertile or table eggs:	- None
b) Meat and eggs for industrial purposes	- None
c) Meat in carcasses or pieces thereof:	- None
d) Salted meat:	- Meat must be covered by a thin layer of NaCL grains or powder up to 10% of the weight of the meat, or remains and presented in separate individual parts or fractions.

- |                                 |  |
|---------------------------------|--|
| f) Meat or remains<br>in brine: | - Impregnated in a 10%<br>saturated solution of<br>water and NaCl. |
| f) Sausages                     | - None   |
| h) Canned products              | - Sterile  |

12.2.2. ORIGIN: Control and in eradication zone  
DESTINATION: Free or in eradication zone

REASON OF MOVEMENT	REQUISITES
a) Fertile eggs:	- Document of proof VND free flock
b) Table eggs:	- Document of proof VND free farm
c) Meat and eggs for industrial purposes:	- Document of proof of VND free flock or farm; or previously cooked during 10 min. at 60°C or gamma irradiated, or pasteurized.
c) Meat in carcasses or pieces thereof:	- Document of proof of VND free flock or farm.
e) Salted meat:	- Document of proof of VND free flock or farm.  - Meat must be covered by a thin layer of NaCL grains or powder up to 10% of the weight of the meat, or remains and presented in separate individual parts or fractions.
f) Meat or remains in brine:	- Document of proof of VND free flock or farm.  - Impregnated in a 10%

	saturated solution of water and NaCl.
f) Sausages  previously cooked during irradiated, or	- Document of proof of VND free flock or farm, or 10 min. at 60°C or gamma pasteurized.
h) Canned products	- Sterile

## 12.2.3. ORIGIN: Free zone

DESTINATION: Free, in eradication or control zone

REASON OF MOVEMENT	REQUISITES
a) Fertile or table eggs or for industrial use	- None
b) Meat in carcasses or pieces thereof:	- None
d) Salted meat:	- Meat must be covered by a thin layer of NaCl grains or powder up to 10% of the weight of the meat, or remains and presented in separate individual parts or fractions.
f) Meat or remains in brine:	- Impregnated in a 10% saturated solution of water and NaCl.
f) Sausages	- None
h) Canned products	- Sterile

1.3.1. ORIGIN: Control and in eradication zone:  
DESTINATION: Control zone:

REASON FOR MOVEMENT	REQUISITES
a) Manure with or without litter, viscera, bedding	- None

12.3.2. ORIGIN: Control or in eradication zone:  
DESTINATION: Free or in eradication zone:

REASON FOR MOVEMENT	REQUISITES
a) Manure with or without litter, viscera, bedding	- Movement prohibited

12.3.3. ORIGIN: In eradication zone:  
DESTINATION: Free zone:

REASON FOR MOVEMENT	REQUISITES
a) Manure with or without litter, viscera, bedding	- Movement prohibited

12.3.4. ORIGIN: Free zone:  
DESTINATION: Free, in eradication or control zone:

REASON FOR MOVEMENT	REQUISITES
a) Manure with or without litter, viscera, bedding	- None

12.4. The movement of avian equipments shall be regulated in all the national territory taking into consideration the zone of origin and destination, reasons for the movement and requisites as hereunder stated:

12.4.1. ORIGIN: Control or in eradication zone:

DESTINATION: Control zone:

REASON FOR MOVEMENT	REQUISITES
a) Chick boxes, or egg cartons that are of discardable material	- None
b) Used avian equipments	- None

12.4.2. ORIGIN: Control and in eradication zone:

DESTINATION: Free and in eradication zone:

REASON FOR MOVEMENT	REQUISITES
a) Chick boxes, or egg cartons that are of discardable material	- Movement prohibited
b) Used avian equipments	- Disinfected under the supervision of an approved or official veterinary doctor

12.4.3. ORIGIN: Free zone

DESTINATION: Free, in eradication or control zone:

REASON FOR MOVEMENT	REQUISITES
a) Chick boxes, or egg cartons that are of discardable material	- None
b) Used avian equipments	- None

### 13. EPIDEMIOLOGICAL SURVEILLANCE

13.1. In the case of an outbreak in a farm or a positive VND virological isolation, the owner of the birds as well as the approved veterinary doctor and/or the one responsible for the farm or the laboratory, as it so corresponds, shall be obligated to immediately

notify such a case to the Ministry.

13.2. In regions, states and zones in eradication or free from VND, it is the responsibility of the federal and state governments, as well as the holders or producers of birds and the approved veterinary doctors to execute the epidemiological surveillance of all suspected or confirmed VND outbreaks.

Said surveillance shall be done through the verification of birds, their products and by-products, as well as the official documentation that is required for their movement from control areas to areas in eradication or free, as well as, by virological monitoring, whenever the federal and state governments so determine it, as well as through the organized producers and those sectors related to the avian industry, in accordance to the provisions under the accords and covenants that to that effect shall be signed.

#### **14. LOCALIZATION OF AVIAN ENTERPRISES, HATCHERIES, SLAUGHTER HOUSES, MEAT PACKERS, SIFTERS AND FEED PRODUCERS**

The provisions relative to this point shall be applicable to the new units that are being planned or are in the process of being established.

14.1. In order to establish a farm of primary or multiplier breeders and specific pathogen free birds, there must be a distance of 5 km from these farms to the nearest avian, porcine or cattle enterprise, including slaughter houses, feed and other by-products processing plants. This distance shall also be applied to human habitations where domesticated birds are reared. The distance can be modified taking into consideration the existent dominance of winds and the topography of the terrain.

14.2 For farms of broilers, commercial layers, turkeys for fattening, and replacement birds the distance shall be of 1 to 3 km between these and other avian, porcine and cattle enterprises, susceptible of modification according to the dominant winds and the topography.

14.3. The hatcheries should be at least 2 km from any other avian, porcine and cattle enterprises. This distance shall also be applied to human habitations.

14.4. The feed producing plants shall be established at least 500 meters away from other avian, porcine and cattle enterprises.

14.5. For the sanitary control of waste such as dead animals and garbage, there must be available one of the following elimination methods.

- a) Incinerating furnaces
- b) Rendering plants

- c) Sanitary burial
- d) Others that the Department may so deem it

14.6. The rendering and sieving plants for chicken and hen manure, with bedding, must be at least 5 km away in relation to other avian enterprises, and at least 1 km away from the side of federal or principal highways, taking into consideration the dominant winds and the topography.

14.7. The transportation of chicken or hen manure with litter must be done in closed vehicles or in sacks.

14.8. For animal consumption or the agricultural use of the chicken and hen manure, there must be a minimum distance of 5 km from other avian farms; or else having previously obtained authorization by the owner of the farm.

## **15. IMPORTS**

15.1. The birds, avian products and by-products, that are to be imported must have an Animal Sanitary Certificate of origin that shall indicate in it, that they come from a country, state, region, farm and/or hatchery free from VND.

## **16. CONCORDANCE WITH INTERNATIONAL STANDARDS**

This Mexican Regulatory Standard is not equivalent to any international standard.

## **17. SANCTIONS**

The non-compliance of the requirements contained within this Standard shall be sanctioned in accordance to the provisions of the Federal Animal Health Act.

## **18. BIBLIOGRAPHY**

ANECA. Curso sobre diagnóstico de laboratorio para la Campaña contra la enfermedad de Newcastle y Salmonelosis Aviar. Enero 1993.

Code of Federal Regulations. Part 1 to 199. Washington, D.C. 1993.

Manual de procedimientos sobre la Protección de la salud animal y humana en las instalaciones pecuarias y avícolas. Agosto. 1983.

Pomeroy, B.S. and K.V. Nagaraja Fowl Typhoid. En: Diseases of Poultry Ed Calnek B.W. et al., 9th Ed. Iowa State University Press, Ames, Iowa USA 1991 pp 452-470.

## **19. TRANSITORY PROVISIONS**

This Standard shall come into effect the following day after its publication in the Official Federal Gazette.

Effective Suffrage. No Reelection.

México, D.F. on the 7th of February of 1995.- The General Law Department, Roberto Zavala Echavarría.- Signature.